



Requirements
Development
& Management



Federal Student Aid

Requirements Development & Management Awareness Presentation



- **Solution Acquisition using the Solution Life Cycle (SLC)**
- **Solution Acquisition and the SLC**
- **SA-CMM in the SLC**
- **SLC and SA-CMM**
- **What is a Requirement?**
- **RDM Definition**
- **RDM Objectives**
- **Benefits of RDM**
- **RDM in the SLC**
- **Developing Requirements**
- **Managing Requirements**
- **RDM Tools**
- **Review and Summary**

Solution Acquisitions using the SLC

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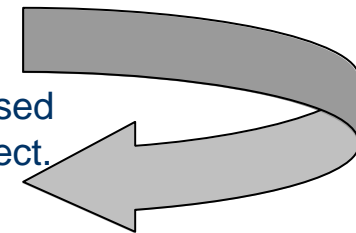


The SLC is a framework to guide a successful solution acquisition from business case to deployment and support. The outline for the SLC is illustrated below.

This framework provides FSA with repeatable processes that allow project management to cut down on time, effort, and unnecessary steps by providing an outline to follow throughout the project.

Planning/ Managing	Acquisition Project Work Plan				
	Vision	Definition	Construction	Deployment	Support & Retirement
	Problem Assessment	System Requirements	Detailed Design	Deployed Solution	Production Services
Results	Solution Recommendation	Preliminary Design	Accepted Solution		

The Acquisition Project Work Plan manages the processes used and deliverables produced throughout the life of the project.



System Acquisition and the SLC

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Vision

Definition

Construction

Deployment

Support &
Retirement

Phases



We begin with a Vision.

A business need has been identified that requires an assessment and solution recommendation.

A member of the FSA Management team is identified to oversee the Vision Phase processes and manage the solution effort from Vision to Support & Retirement.

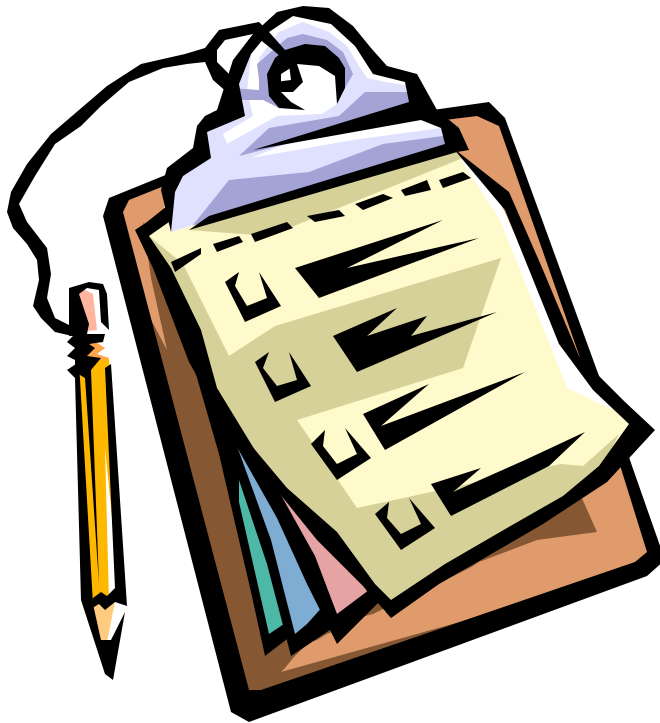
This FSA employee is the Executive Sponsor of the project.

SA-CMM in the SLC

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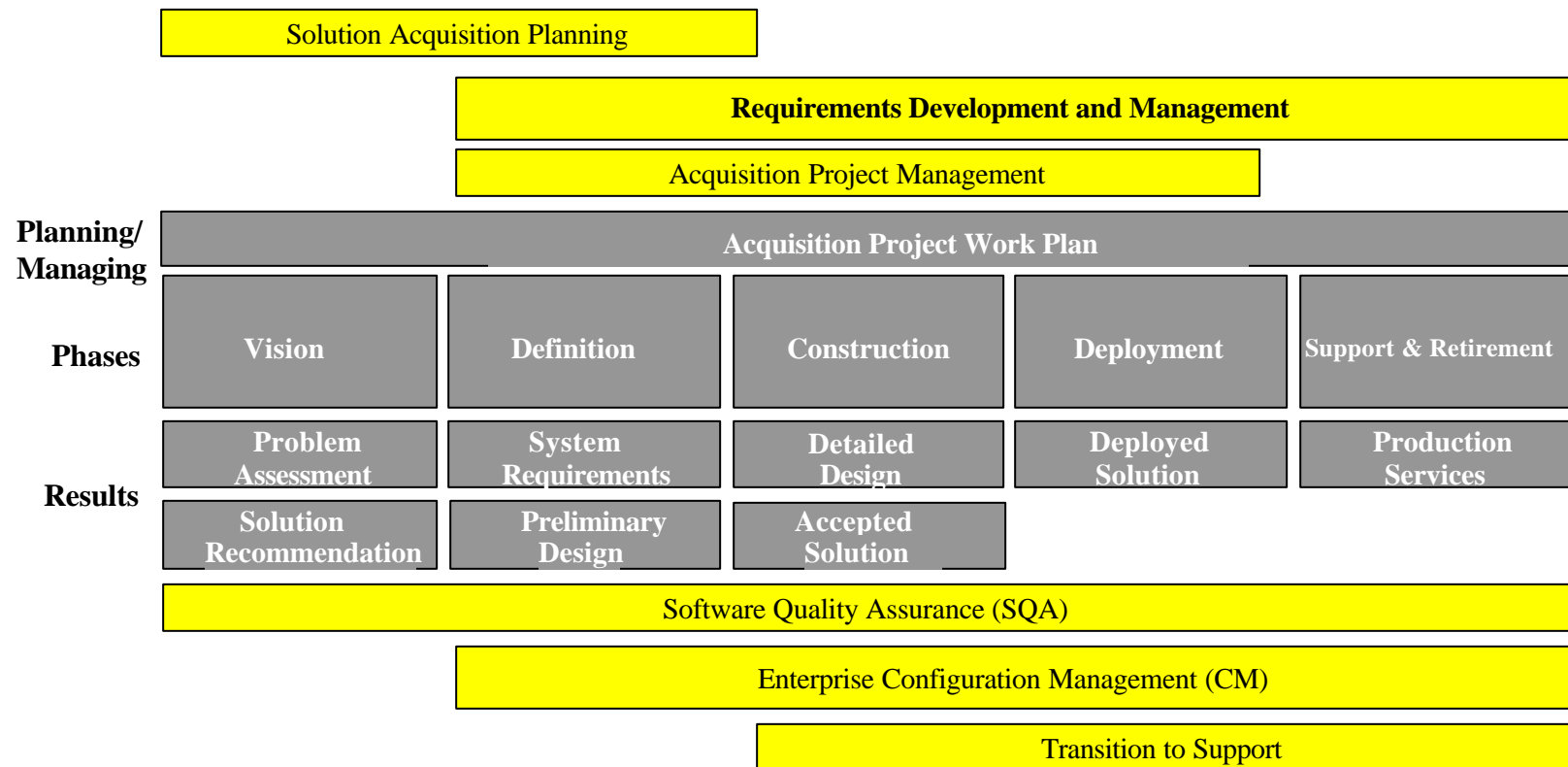
The Software Acquisition Maturity Model (SA-CMM) is a Capability Maturity Model for organizational improvement.



The SLC is further enhanced by the SA-CMM.

SA-CMM identifies Key Process Area (KPAs) on which organizations should focus their efforts to ensure their Solution Acquisition projects are run efficiently.

These KPAs align with different phases of the SLC. Defining and developing repeatable processes and procedures within each KPA will help FSA increase the efficiency of the SLC.





What is a Requirement?

A requirement is a need that has to be met or satisfied.

SA - CMM defines two types of requirements

- Technical
- Non-Technical

Requirements types can be general or detailed

- General - High Level Requirement
- Detail - Low Level Requirement

Requirement types have different characteristic

- Attributes

What is RDM?



Requirements Development and Management (RDM) is developing and managing system requirements with end users and key affected groups in mind.

Requirements are:

- **Baselined**
- **Controlled**
- **Traceable**
- **Verifiable**



What is RDM?

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RDM Involves:

Developing system requirements

Managing system requirements



In Developing - requirements are clear, complete, and baselined.

In Managing - requirements are controlled, monitored, and verified.



The purpose of RDM is to establish a common and clear definition of system requirements understood by all involved parties.

- The Goals of RDM are:
 - Goal 1: Requirements are developed to establish a baseline for system engineering and management use.
 - Goal 2: System plans, products, and activities are kept consistent with the requirements.

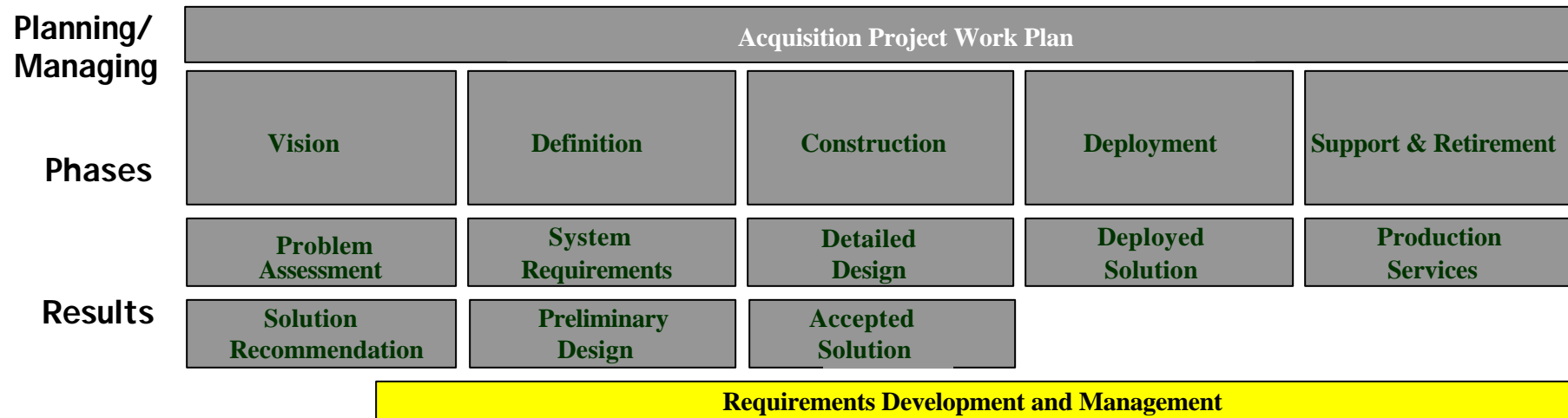


RDM promotes the understanding of business and user needs.

- Well developed and managed requirements decrease cost and time of system delivery.
- Results Include:
 - Well - formed requirements
 - Traceable to end user needs
 - Requirements are identified
 - Requirements are reviewed (approved and meet criteria)



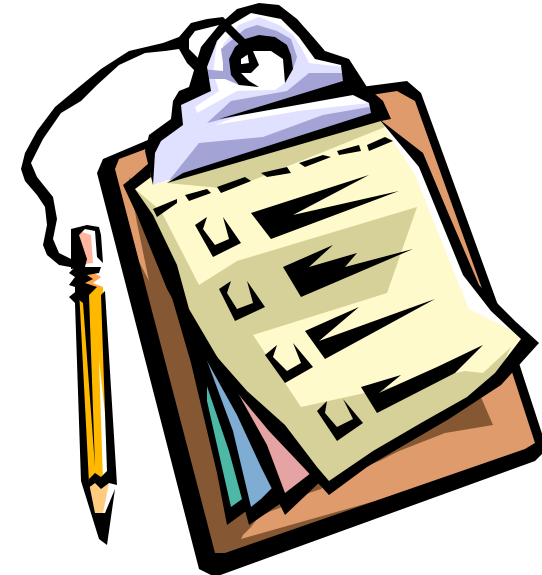
The Solution Life Cycle (SLC) provides the processes and procedures for Requirements Development and Management. RDM begins during Vision and ends in the Support & Retirement Phase.





High Level Requirements

- General requirements that can be decomposed into detailed testable requirements.
- The RDM High Level Process Flow is used to develop high level requirements that are included into the business case during the Vision phase of the SLC.

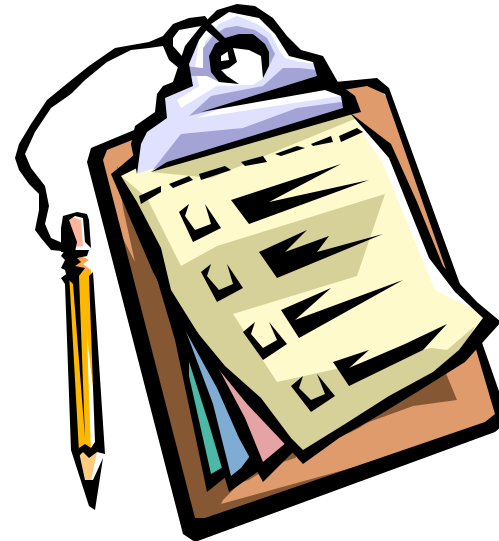


See RDM Process Guide.



Low Level Requirements

- The functional detailed requirement that can be tested or verified.
- The development of low level requirements is performed after approval of the business case and during the Definition Phase of the SLC.



See RDM Process Guide.



Requirements Management – is the controlling and managing requirements by:

- Establishing Change Control Processes
- Establishing Change Control Group
- Implementing Measurements Procedures
- Reporting of Status, Project Schedule, etc.





Tools used throughout the RDM process include:

- High Level Requirements
- Low Level Requirements
- Policy
- Work Plan
- Measurement and Analysis
Job Aide
- Requirements Traceability
Matrix





Summary points include:

- SLC and SA-CMM
- RDM Definition
- RDM in the SLC
- Benefits of RDM
- Questions?

